



L. Barbee Ponder IV
General Counsel & Vice President Regulatory Affairs

October 6, 2014

Via Electronic Filing

Marlene H. Dortch, Secretary
Federal Communications Commission
445 Twelfth Street SW
Washington, DC 20554

Re: *Terrestrial Use of the 2473-2495 MHz Band for Low-Power Mobile Broadband Networks; Amendments to Rules for the Ancillary Terrestrial Component of Mobile Satellite Service Systems* – IB Docket No. 13-213, RM-11685;
Iridium Constellation LLC Petition for Rulemaking to Promote Expanded Mobile Satellite Service in the Big LEO MSS Band – RM-11697
Ex Parte Notice

Dear Ms. Dortch:

On October 1, 2014, Paul Monte, Vice President, Engineering & Operations for Globalstar, Inc. (“Globalstar”), Timothy Taylor, Vice President, Finance, Operations and Strategy for Globalstar, Regina Keeney and Steve Berman of Lawler, Metzger, Keeney & Logan, LLC, and I met with Mindel De La Torre, Troy Tanner, Jose Albuquerque, Robert Nelson, Karl Kensinger, Jennifer Gilsenan, and Lynne Montgomery from the Commission’s International Bureau. During this meeting, Globalstar’s representatives expressed opposition to Iridium’s revised Petition for Rulemaking to appropriate a portion of Globalstar’s MSS spectrum in the Lower Big LEO band, where Globalstar is licensed to operate at 1610-1618.725 MHz.¹ Globalstar provided the attached presentation and discussed the status of its MSS business, including what has changed since the Commission adopted the current Big LEO L-Band Plan in 2007.

Unlike Iridium, Globalstar is Growing

At the meeting, Globalstar’s representatives explained that it is experiencing a substantial increase in demand since completing deployment of its second-generation constellation. With its second-generation constellation in place and full two-way service restored, Globalstar is experiencing accelerated growth across both two-way and simplex

¹ See Petition for Rulemaking of Iridium Constellation LLC, RM-11697 (Feb. 11, 2013); Supplemental Comments of Iridium Constellation, RM-11697 (May 5, 2014); Opposition of Globalstar, Inc. to Petition for Rulemaking, RM-11697 (Dec. 2, 2013).

business lines, with greater minutes of use, increased subscriber additions, and expanding equipment sales. In contrast, Iridium has not shown any recent, significant growth. Indeed, we pointed out that there is no mention in any of Iridium's Securities and Exchange Commission ("SEC") filings about its alleged need to obtain more spectrum to support any future growth. We also pointed out that Iridium's petition is purely an anticompetitive attempt to hobble a competitor that has recently re-entered the marketplace with a variety of new duplex voice and data products and capabilities that offer superior quality MSS at lower prices. Iridium's latest 10-K filing contains a discussion about the slowed growth of its own MSS business:

While we expect the number of our subscribers and revenue to continue to grow, we expect the future growth rate will be slower than our historical growth and may not continue in every quarter of every year. . . . ***We could lose market share and revenue as a result of increasing competition from companies in the wireless communications industry, including cellular and other satellite operators, and from the extension of land-based communications services.***²

Globalstar's Proposed TLPS is Consistent with a Vibrant MSS Business

At the meeting, we also reiterated that, contrary to Iridium's claims, Globalstar's future provision of Terrestrial Low Power Service ("TLPS") is consistent with and aids its long-term commitment to a vibrant MSS business. The terrestrial use of Globalstar's Upper Big LEO frequencies represents an efficient use of spectrum resources and would provide a potential source of revenue to support its MSS operations. Globalstar and its terrestrial partners would provide TLPS as a carrier-grade, managed offering largely in urban areas where there is Wi-Fi congestion and highly limited MSS usage. There is limited provision of MSS in U.S. urban areas not only because of the availability of terrestrial-based options for wireless voice and data services, but also due to the "urban canyons" that cause "shadowing" and prevent MSS customers from receiving a signal. Iridium itself has not demonstrated that that it provides meaningful MSS in urban areas, nor is it able to use its spectrum for terrestrial service in those areas.

² Iridium Communications Inc., Annual Report (Form 10-K), at 27 (March 4, 2014) (emphasis in original).

As Globalstar has previously described, interference to MSS would be minimized through the deployment of a carrier-grade, managed TLPS network. TLPS access points would be carefully controlled by an enterprise Network Operating System (“NOS”) analogous to systems currently used to manage pico- and femto-cellular infrastructure.³ With this capability, Globalstar would have a rapid means of identifying, controlling, and eliminating interference to MSS if necessary in a particular location. A remote technician could use the TLPS NOS to shut down a particular TLPS access point, alter access points’ power output or radiation patterns, or perform other needed diagnostic and remedial functions.

Globalstar’s MSS network will continue to provide critical back-up capabilities virtually *everywhere* for public safety personnel during disasters when terrestrial networks can be rendered inoperable. In situations where all terrestrial facilities are down in an affected area, Globalstar’s global MSS network will continue to function normally. For this reason, public safety entities involved in relief efforts in the United States and around the world have relied on Globalstar’s satellite services after earthquakes, hurricanes, and other disasters. Earlier this year, Globalstar reaffirmed that, with Commission authority to provide TLPS, it will provide MSS free of charge in federal disaster areas.⁴

Rather than diminish the availability of MSS, TLPS may in fact help increase public access to MSS during and after natural or manmade disasters where terrestrial-based networks have been rendered unavailable. While satellite services have traditionally been relied upon by first responders and public safety personnel in such situations, the overwhelming majority of the affected public has not had the benefit of satellite communications. Now, given Globalstar’s unique MSS capabilities, a network of TLPS access points could potentially serve as a wider public portal to satellite-based communications if and when such services are needed.

In June 2014, Globalstar introduced Sat-Fi to the MSS marketplace, its first new duplex MSS product to operate over its second-generation constellation. Sat-Fi transforms a smartphone into a Globalstar satellite phone, allowing full duplex voice and

³ Earlier this year, Globalstar issued a Request For Information (“RFI”) to the industry to commence the process of designing the access points that would be manufactured as soon as possible after a Commission decision to adopt its proposed rules in IB Docket No. 13-213. Globalstar received extensive feedback from multiple industry participants in response to this RFI.

⁴ Comments of Globalstar, Inc., IB Docket No. 13-213, at 40-41 (May 5, 2013).

data communications over the Globalstar MSS system. A consumer can simply download an app onto her smartphone, enabling voice and data communications via satellite when within range of the Sat-Fi hotspot.

The implications of Sat-Fi technology when integrated into a TLPS network could be profound in post-disaster urban environments. In urban areas, TLPS access points might be installed within buildings and at street level outdoors with antennas radiating their power downward, while the Sat-Fi transceiver and associated hardware would be installed on roof tops with antennas concentrating their power upward. In essence, Globalstar's TLPS network with a managed Sat-Fi component might be able to turn every smartphone in Midtown Manhattan into a satellite phone for full duplex (voice and data) service. In the event of a natural or manmade disaster severe enough to disrupt all terrestrial wireline and macro wireless networks in such urban areas, Globalstar's TLPS network with a managed Sat-Fi component could be the only communications conduit into and out of the disaster area for the vast majority of affected citizens.

Globalstar Intensively Utilizes Its Entire L-Band Spectrum Allocation for MSS

At the October 1 meeting, Globalstar's representatives also provided information regarding its current and future use of the Lower Big LEO spectrum that Iridium seeks to appropriate. We explained that Iridium's grab of its competitor's licensed spectrum would materially degrade Globalstar's MSS and harm its satellite business, to the detriment of its customers. These harms would become more severe with the expected increase in MSS traffic over Globalstar's second-generation MSS network.

We also explained how objectionable such a reassignment of Globalstar's spectrum would be given parties' reliance upon the Commission's prior decisions in pursuing a multi-year process to design, launch, and deploy the world's first second-generation constellation of LEO satellites. Globalstar, its investors, and its Bank Group have all relied upon the Commission's 2007 Order, and any reassignment of spectrum now would entirely undercut the regulatory certainty needed for such multi-year projects.

Globalstar's representatives also discussed recent milestones in the development of its MSS business, including the completion of a 7000 mile test flight during which the aircraft's location data was transmitted every second via Globalstar's satellite system, tracking that aircraft in real time during the flight. Such Globalstar aviation solutions utilize Lower Big LEO band spectrum above 1616 MHz for uplink operations, the very spectrum that Iridium seeks. Adopting Iridium's proposal would essentially remove Globalstar as a potential competitor to Iridium's own future aviation aspirations. Globalstar also indicated that it had recently eclipsed 3000 rescues initiated using its

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SPOT line of personal tracking devices, and that current efforts to install an additional gateway in Botswana to cover the whole of Southern Africa would virtually complete the deployment of Globalstar's simplex network over the whole of the Earth's inhabited land masses.

Globalstar's Joint Meeting with the International Bureau and Iridium

Following Globalstar's meeting with International Bureau staff, all of these Globalstar representatives and International Bureau staffers plus Diane Cornell, Special Counsel to Chairman Tom Wheeler, held a joint meeting on the same day with representatives of Iridium Constellation LLC ("Iridium"), including Matthew Desch, Chief Executive Officer, Iridium, Donna Bethea-Murphy, Vice President of Regulatory Engineering, Iridium, Brandon Hinton, Director, Systems Engineering & Test for Exelis, Inc., and Michael Senkowski and Gregg Elias of Wiley Rein LLP, counsel to Iridium.

At the beginning of this joint meeting, Iridium claimed that it is spectrum constrained and indicated that it would seek a protective order to file additional confidential information regarding its alleged need for additional spectrum to support its future service offerings. If it does so, Iridium will be providing this information approximately twenty months after filing its Petition for Rulemaking and approximately nine months after the close of the comment cycle on that Petition. Globalstar notes that the question of whether Iridium suffers from a non-disclosed spectrum shortage is a far different question than whether one competitor should be able to appropriate the spectrum resources of another via regulatory scheming. Nonetheless, Globalstar does not object to such a belated filing, as long as Iridium expedites its submission and Globalstar is provided a full opportunity to review and comment on Iridium's filing. Globalstar requests that the International Bureau establish a deadline for Iridium to make its planned disclosure.

During the meeting, we addressed issues surrounding the companies' respective use of the Lower Big LEO band, including shared spectrum at 1617.775-1618.725 MHz, and explained how important such spectrum is for Globalstar's future growth. Toward the end of the meeting, we discussed the fact that the Commission decided in 2007 to minimize the amount of shared spectrum in the Lower Big LEO band due to concerns that mutual interference would result as both MSS providers began to fully load their systems. While there have been certain changes in this band since 2007, including Globalstar's completion of its second-generation launch campaign, these concerns regarding the effects of sharing remain. In the final analysis, the best approach for the Commission today is to preserve the band plan that it adopted in 2007 after a four-year proceeding.

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Pursuant to section 1.1206(b)(2) of the Commission's rules, 47 C.F.R. § 1.1206(b)(2), this *ex parte* notification and the attached presentation are being filed electronically for inclusion in the public record of the above-referenced proceeding.

Sincerely,



L. Barbee Ponder IV
General Counsel & Vice President Regulatory Affairs

Attachment

cc: Jose Albuquerque
Diane Cornell
Mindel De La Torre
Jennifer Gilsenan
Karl Kensinger
Lynne Montgomery
Robert Nelson
Troy Tanner



Be Heard.

Federal Communications Commission

International Bureau

October 2014

Agenda

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Unlike its Competitor, Globalstar Is Growing

2

Globalstar's Recent MSS Milestones

3

Globalstar's Assigned Spectrum

4

Deny Iridium's Petition

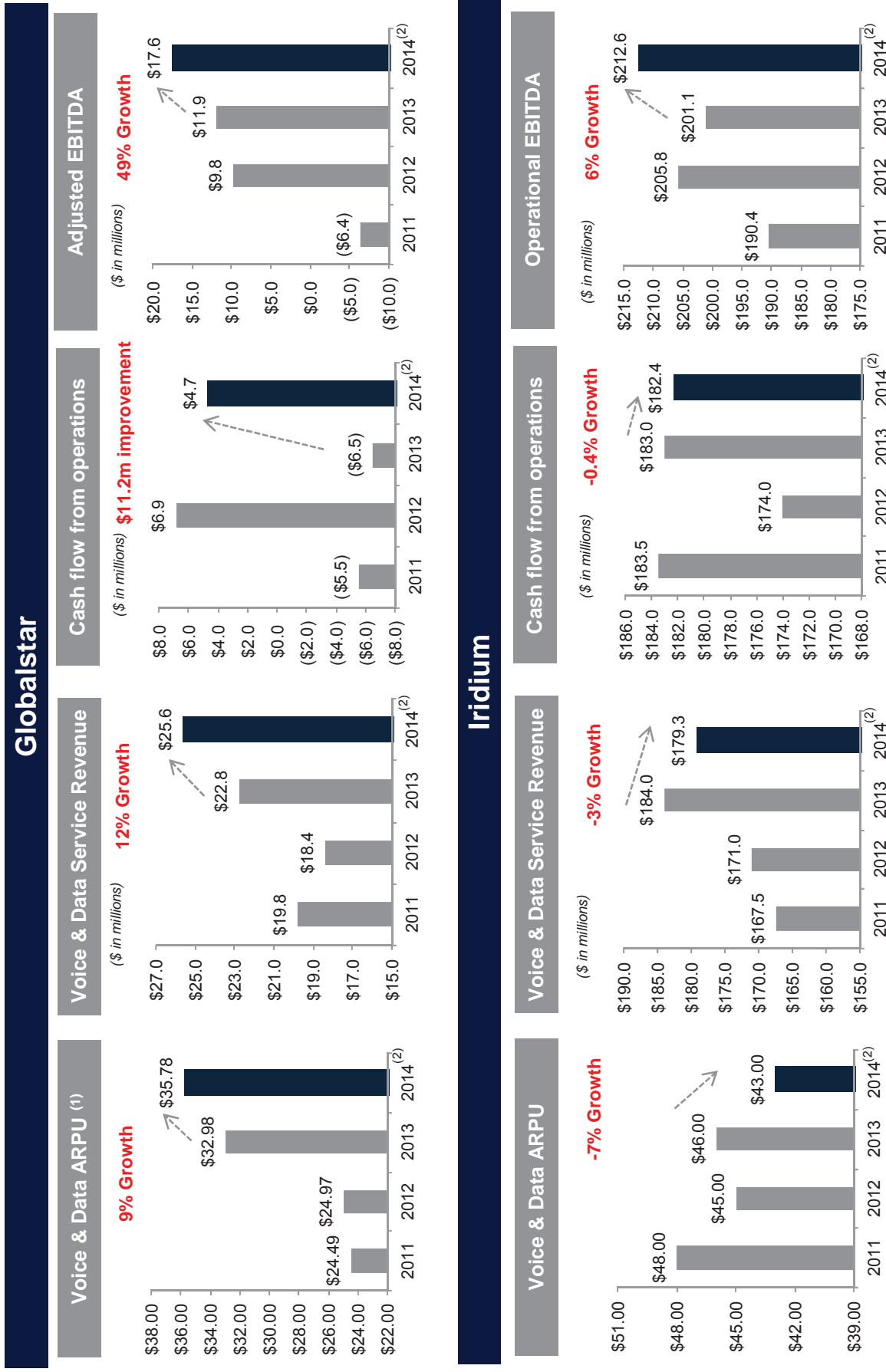
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Addendum 1: Globalstar's Recent Corporate Presentations at Bank of America
Merrill Lynch and Imperial Conferences

Unlike its Competitor, Globalstar Is Growing



MSS Growth Profile – Globalstar vs. Competitor (Annual)



(1) Globalstar Voice & Data (Duplex) ARPU for prior period adjusted for deactivation of approximately 26,000 suspended or non-paying subscribers in Q1 2014.
(2) 2014 figures represent the run-rates through published data released in Q2 2014 10Q.
(3) Note – For Globalstar, the high operating cash flow contribution from 2012 primarily arises from a \$6.0 million refund related to the termination of an agreement with a vendor for services related to the second-gen constellation.

MSS Growth Profile – Globalstar vs. Competitor (Quarterly)



(1) Globalstar Voice & Data (Duplex) ARPU for prior period adjusted for deactivation of approximately 26,000 suspended or non-paying subscribers in Q1 2014.

Globalstar's Recent MSS Milestones

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Globalstar's New Gateway Construction: Botswana



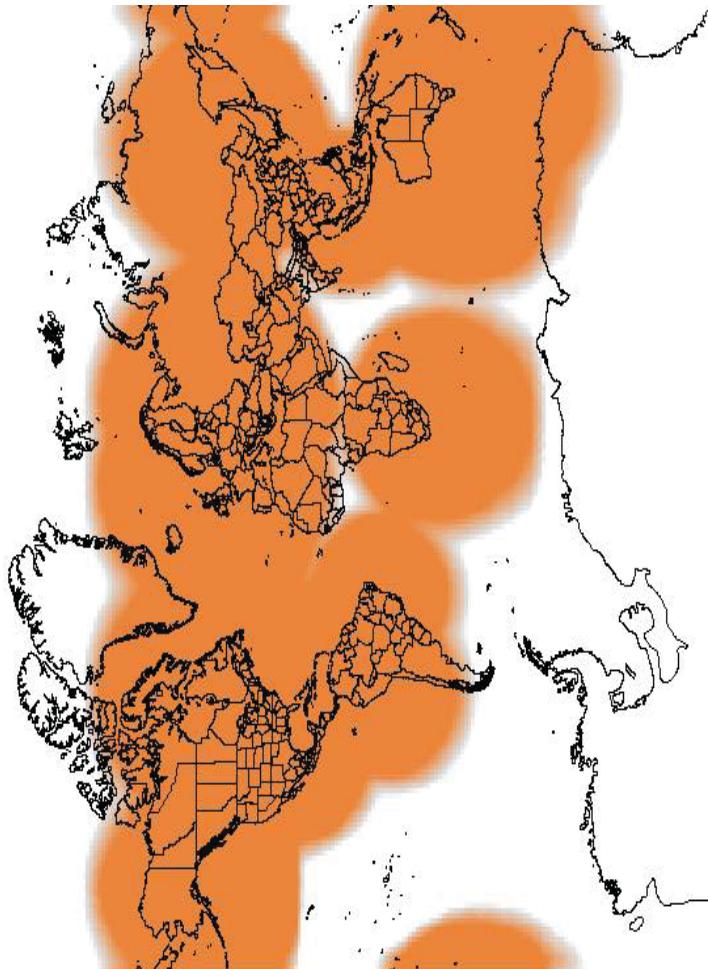
9/2/2014

9/13/2014

9/16/2014

9/19/2014

Globalstar Simplex Coverage Map (With Botswana Gateway)



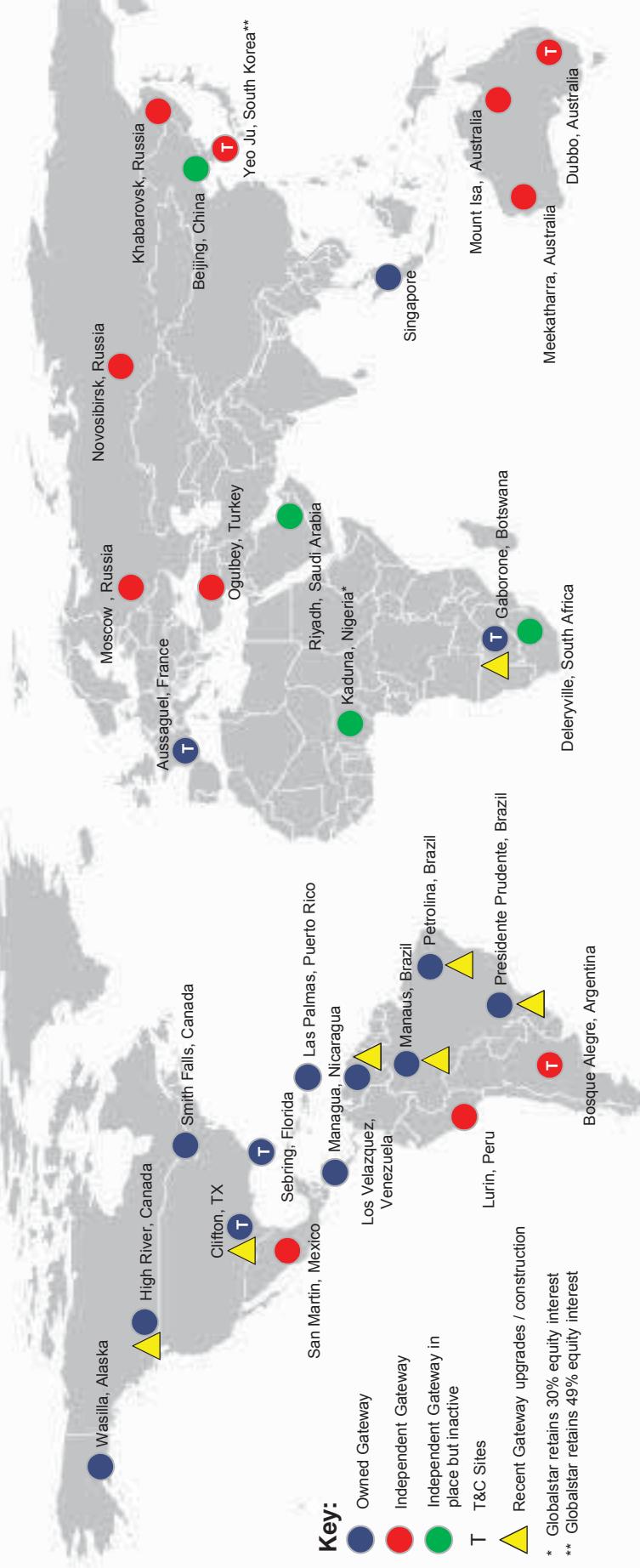
Primary Globalstar Service Area (100-98% completion rate*)

Fringe Globalstar Service Area (90-80% completion rate*)



Globalstar Ground Stations & Recent Upgrades

Gateway Ground Stations on Six Continents



Second-Generation Gateway Upgrade Status

- Contract amendments with key vendors completed in 2014
- Hughes to ship two Radio Access Nodes in early October
- Ericsson to ship equipment to Clifton in mid-October
- Hughes and Ericsson to initiate installation and integration by late October
- Hughes Packet Data Factory Acceptance Testing to be held in October 14-24
- Over the Air testing to begin Q4 2014
- Second-Generation ground upgrades to be complete by 2016 globally – rollout expected to start in North America followed by Europe and Brazil

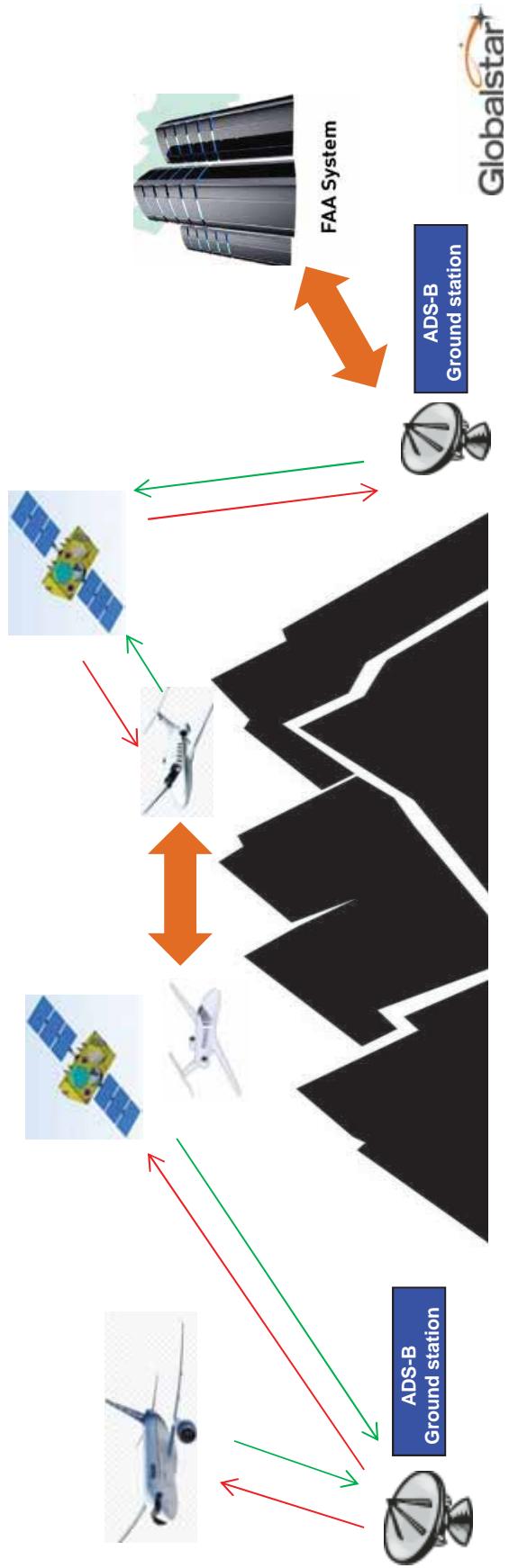


Racks after passing the shipment readiness review

ALAS – The only real next-generation, space-based air traffic management system

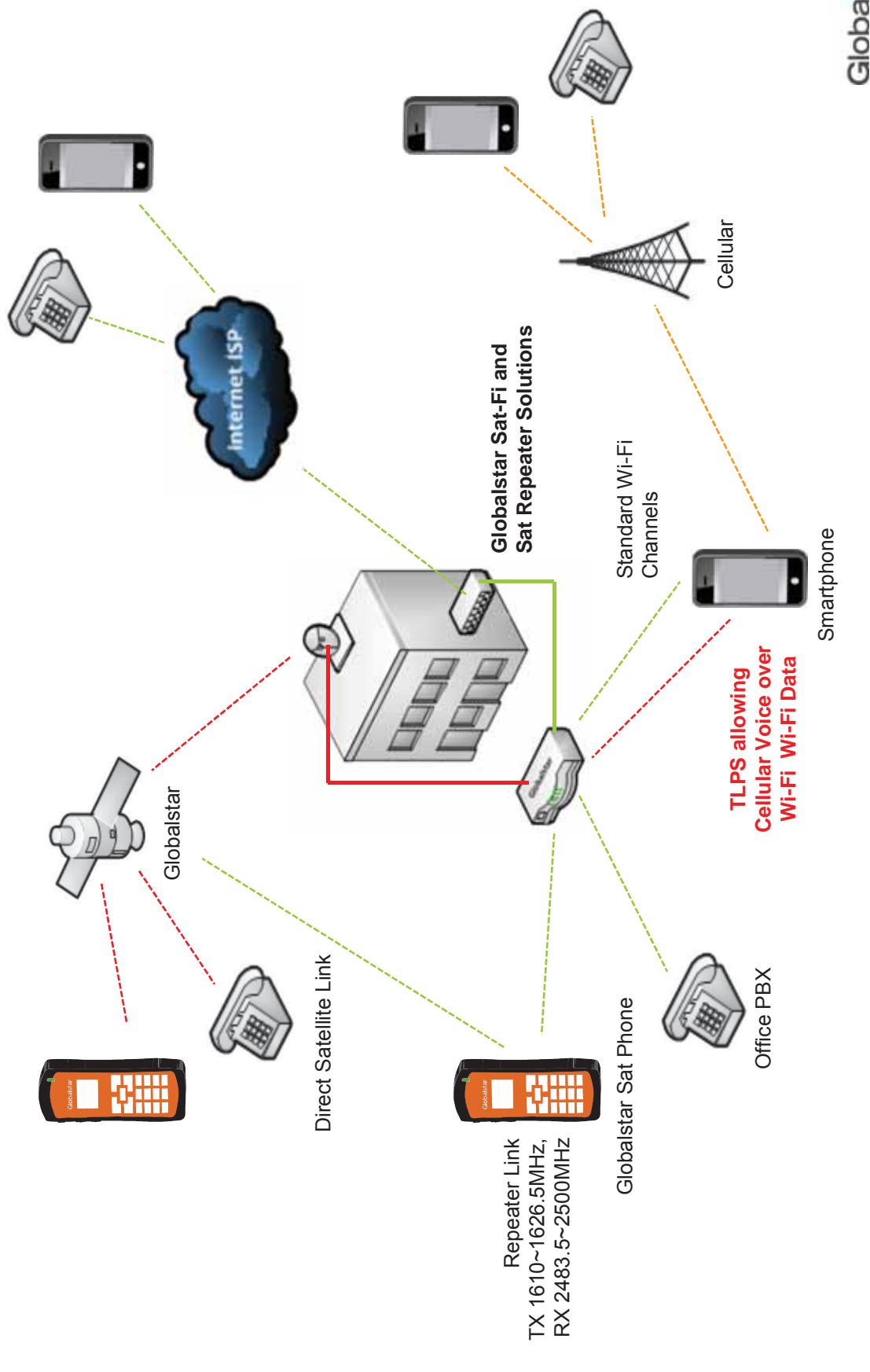
Recent 7,000 Mile Flight Demonstrating Our Dual-Link Space-Based ADS-B System

- Full duplex capability for sending flight information to and from aircraft in real-time;
- Supports ADS-B in (FIS-B and TIS-B) applications, as well as ADS-B out;
- Fully compatible with both 1090 MHz extended squitter (for commercial aviation) and 978 MHz UAT (Universal Access Transceiver) for aircraft operating below 18,000 feet;
- Substantial and scalable capacity ensures ability to track all aircraft globally
- Highly reliable system with minimal points of failure



Globalstar's Sat Repeater Solution

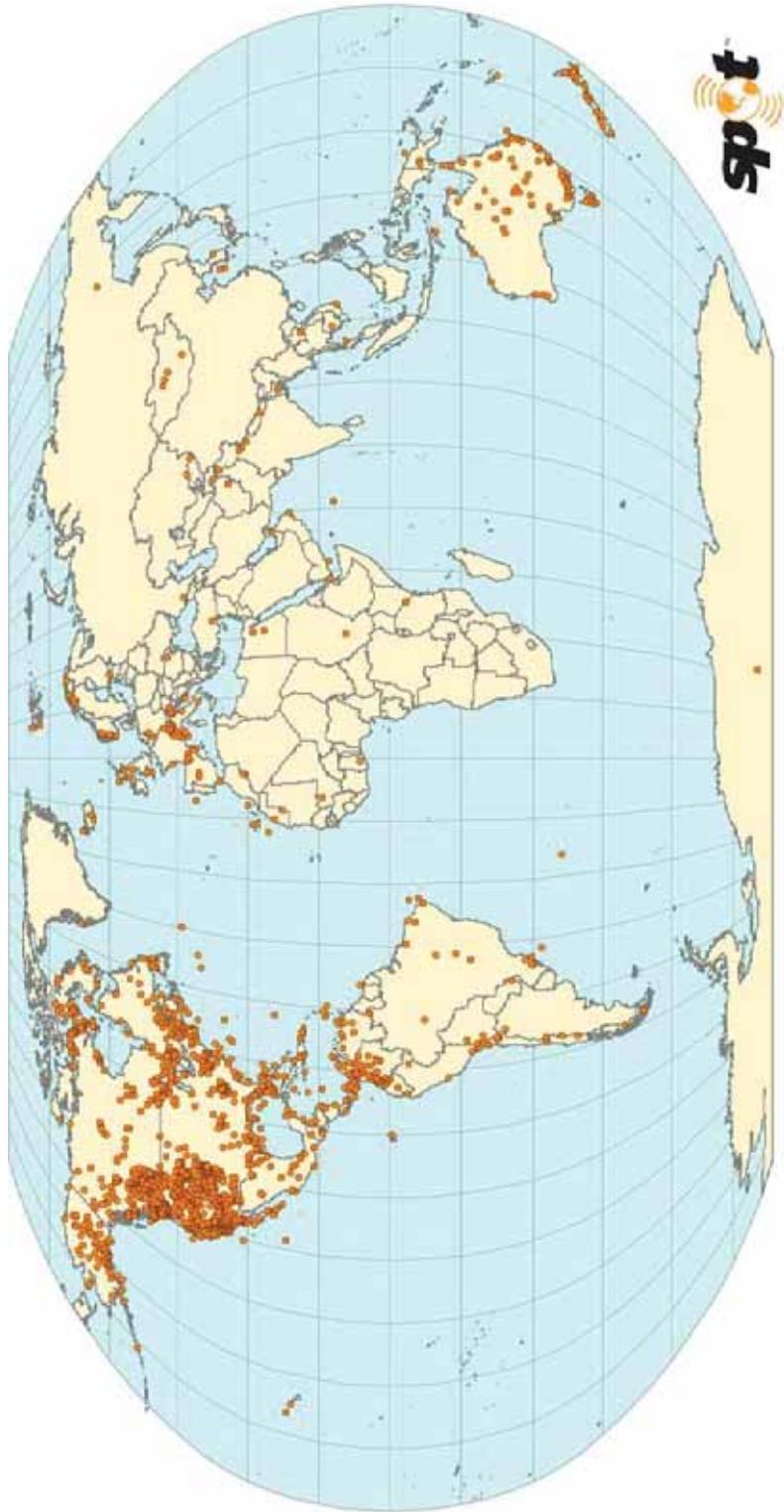
- TLPS is not a choice between satellite service and mobile broadband. Globalstar can continue to offer both solutions with a managed service offering.
- A holistic solution that can turn everyone's smartphone into a satellite phone, if and when necessary.



3,000 SPOT – Initiated Rescues & Counting!

- Since 2007, Globalstar's SPOT customers have initiated over 3,000 rescues globally, averaging 2 people per rescue.
- On average, Globalstar's SPOT customers are initiating 1 rescue every day somewhere around the world.
- No other communications product has achieved the Life Saving Record of SPOT.

SPOT RESCUE MAP: 3,000 RESCUES AND COUNTING

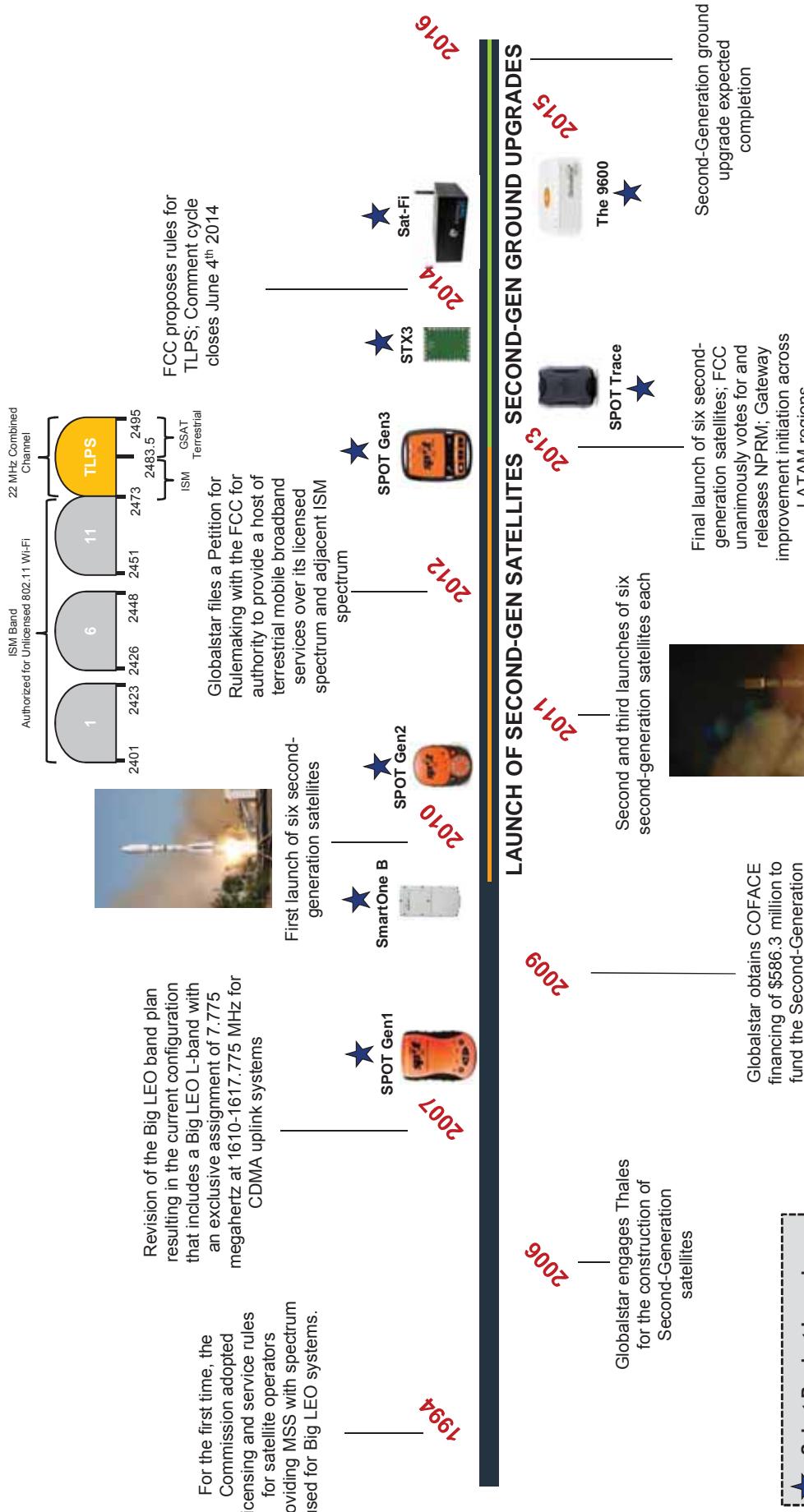


Globalstar's Assigned Spectrum

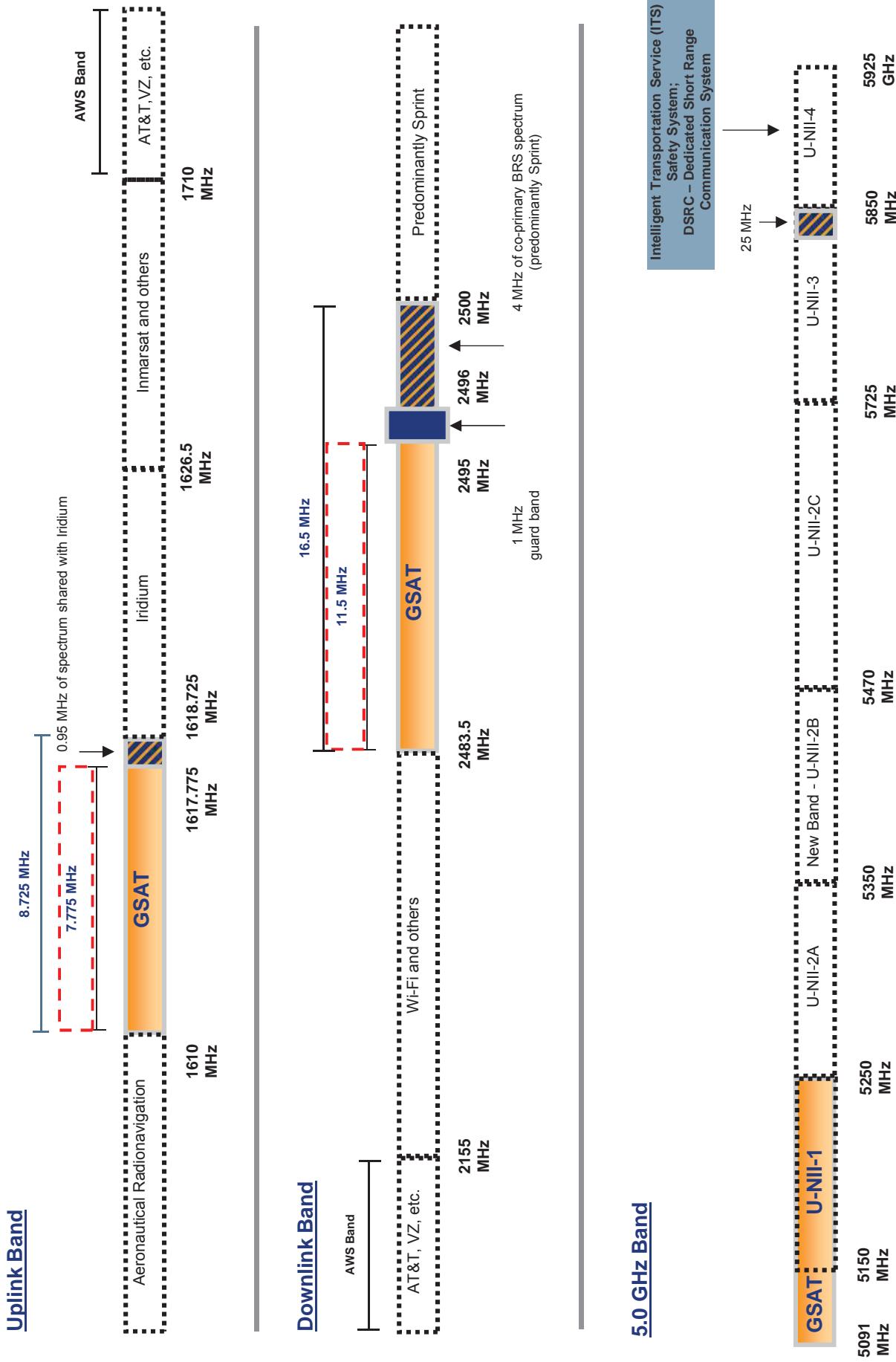
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L-Band Assignments Have Driven Investments in MSS

Globalstar and its investors, including the bank group, have relied upon the FCC's L-Band assignments to finance the world's first second-generation constellation of LEO satellites

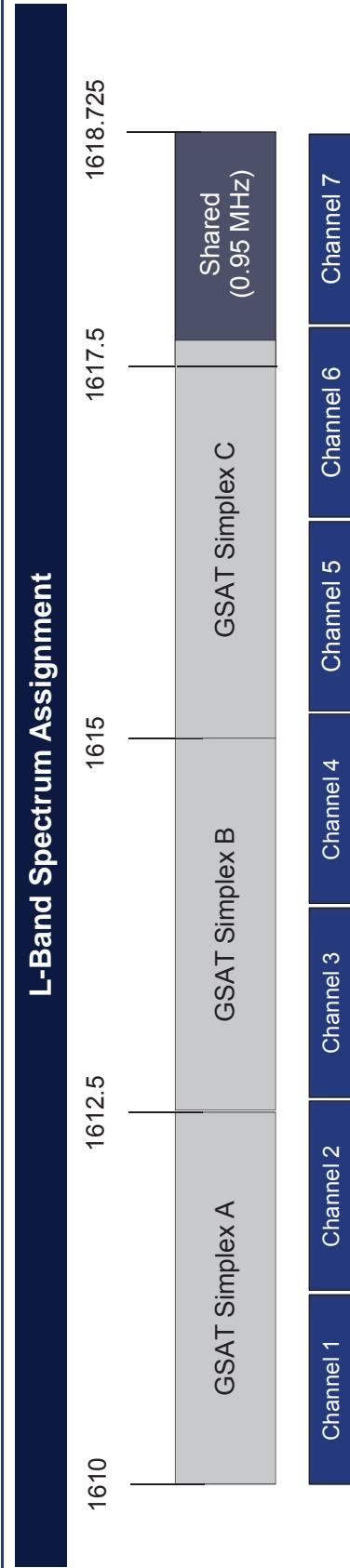


Globalstar U.S. Spectrum Assignment



Globalstar's Use of its L-Band Spectrum

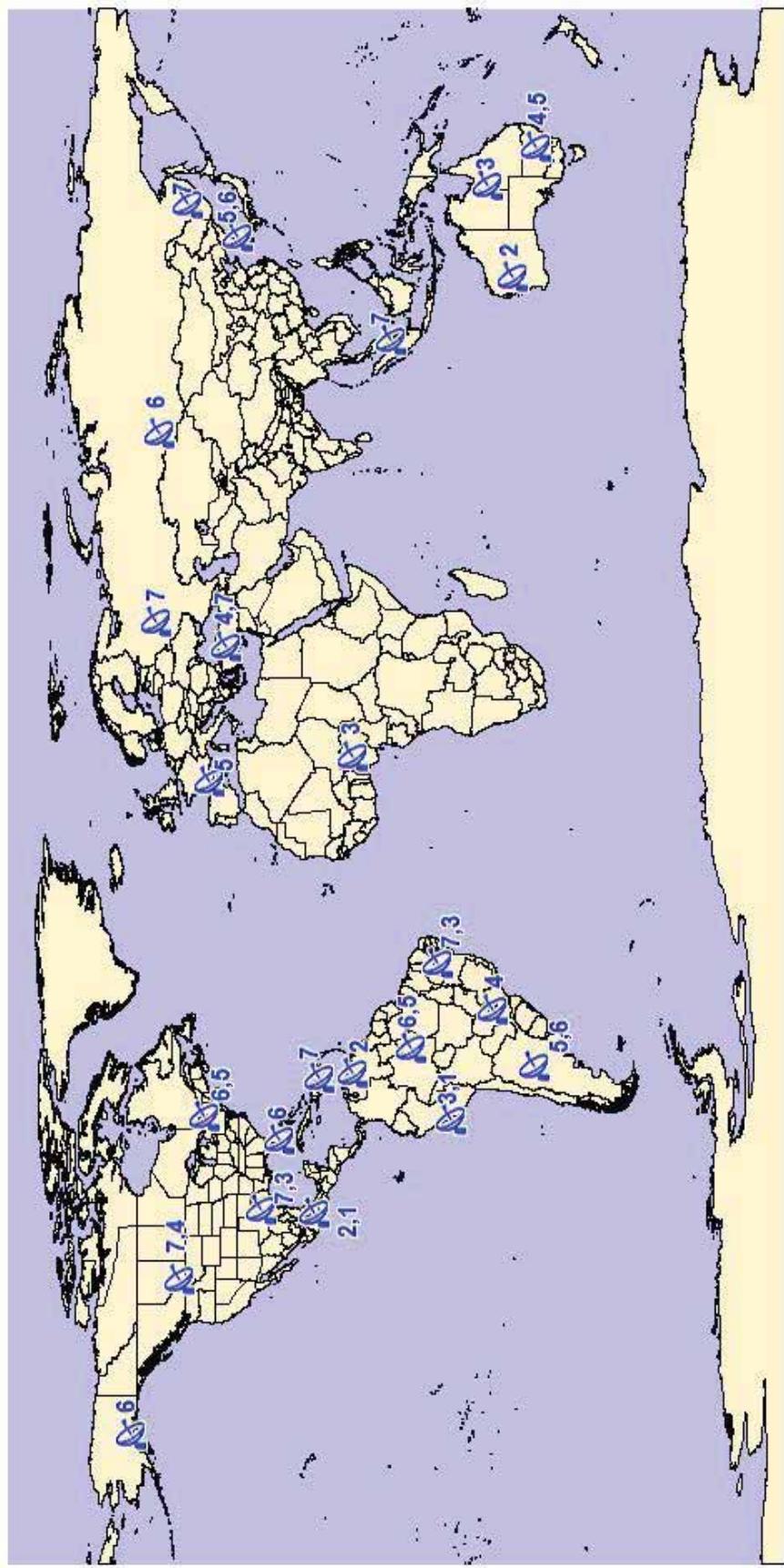
As the fastest growing MSS provider, Globalstar is utilizing all of its L Band spectrum – every MHz, every day, across multiple continents



- Globalstar is dedicated to providing critical mobile satellite services throughout the United States and the world – it is the fastest growing MSS company globally
- The Company has launched several new affordable MSS products over the last 12 months – products have commercial and mass market appeal
- Globalstar has invested over \$1 billion in launching a state-of-the-art satellite constellation – ground infrastructure upgrades are expected to be complete by 2016
- Globalstar utilizes all of its L-Band spectrum, including channel 7. Channel 7 is used in North America, South America, Europe and across Asia through the following gateways: Clifton (TX), Moscow (Russia), High River (Canada), Khabarovsk (Russia), Las Palmas (Puerto Rico), Petrolina (Brazil), Oglilby (Turkey)
- Globalstar is actively pursuing growth opportunities in greenfield territories – provides coverage beyond Globalstar's existing network

Globalstar's Current Use of Channel 7

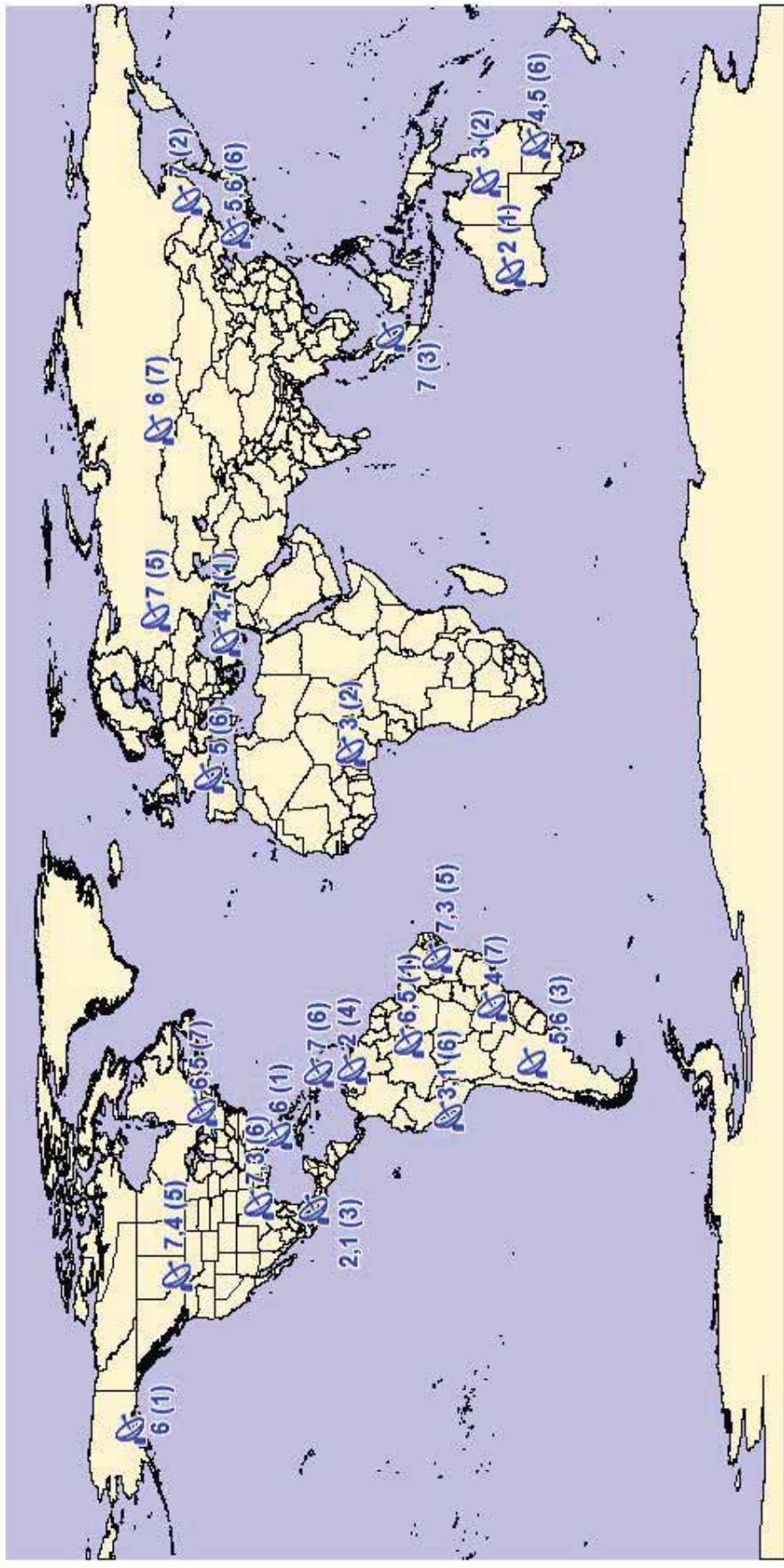
Channel 7 represents the second-most used set of frequencies for Globalstar's Mobile Satellite Services



Globalstar Reverse Link Frequency Allocation

September 30, 2014

Globalstar's Planned Use of Channel 7



Globalstar Reverse Link Frequency Allocation (GS2 frequencies in parentheses) September 30, 2014

Deny Iridium's Petition

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Deny Iridium's Petition

The record supports denial of Iridium's Petition

- Globalstar uses its entire L-Band assignment around the world to provide mobile satellite services
- Globalstar has invested in excess of \$1 billion in its satellite network since the FCC's 2007 L-Band decision, and has continued to invest in ground upgrades, gateway expansion, product development and R&D
- There is no basis for the Commission to hobble Globalstar and its future growth by reassigning any of its spectrum to its primary competitor
- Iridium has not provided any support for its claim that it must have more spectrum, much less have the spectrum of its competitor
- Iridium's theory rests on the erroneous premise that Globalstar is not committed to MSS and / or intends to exit the national MSS market – nothing could be further from the truth
- Globalstar is expanding its MSS capabilities both nationally and internationally – Globalstar is growing; its competitor, Iridium, is not

Addendum 1: Globalstar's Recent Corporate Presentations at
Bank of America Merrill Lynch and Imperial Conferences

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Company Overview

Globalstar is a leading provider of mobile satellite services with a full product suite supporting communications beyond the range of traditional cellular services

- Global provider of mobile and fixed satellite services with sales in over 120 countries
- Founded in 1991 as a partnership between Loral Space and Qualcomm
- Thermo Companies purchased Globalstar out of bankruptcy in 2004
 - Thermo has invested over \$600mm over the last 10 years
 - Thermo owns 65% of Globalstar
- Listed NYSE MKT (GSAT)
- Headquartered: Covington, LA (relocation complete in 2010)
- Network Operations and Control Facility: Milpitas, CA;

History & Key Facts

- Global satellite network
 - New satellite upgrade completed in 2013 (~\$1 bn investment)
 - ~600k subscribers – commercial, government and consumer markets
 - EBITDA positive operations – accelerating growth after network restoration
 - Network of owned and wholesale ground operation gateways
 - Market leading CDMA-based voice quality at lowest cost
- 2.4 GHz S-band and 1.6 GHz L-band spectrum positions
- 2.4 GHz Terrestrial Low Power Service (“TLPS”) NPRM proceeding continuing before FCC
- Material tax assets to offset future income

Core Assets

Core MSS Addressable Market



No Terrestrial Network

Failure of Terrestrial Network

Areas Outside Cellular Networks

- Connectivity to **two billion people** who live, work and/or play in areas not covered by cellular service

- Provides alternative network access in areas prone to **natural disasters**

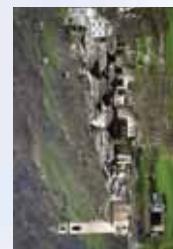
- Provides the ability to **track anything, anywhere, anytime** globally

- Over **150 million adventure trips** taken annually⁽¹⁾

- **Provides public safety** with needed connectivity when cellular service is down due to overloaded / failed infrastructure

- Provides **low cost alternative** to **international roaming** when traveling abroad

- Enables basic services, NGOs, **emergency response** and business continuity



Source: *Adventure Tourism Market Report* by George Washington University, Adventure Travel Trade Association, Xola Consulting, Informa Telecoms & Media.
(1) Adventure Tourism Market Report by George Washington University, Adventure Travel Trade Association, Xola Consulting, Statistic based on survey conducted with participants in Latin America, North America, and Europe.
(2) CIA World Factbook, as of 2010.

Globalstar's Turnaround

Since early last year, Company completed constellation restoration, materially improved its balance sheet, has produced accelerating operating results and has made significant progress on the spectrum proceeding

January 2013	September 2014
Approaching \$71.8 million 5.75% Notes put date of April 2013	Successfully exchanged 5.75% Notes in May 2013
Required COFACE Facility restructuring including principal schedule, covenants and default status	Amended and Restated Facility Agreement effective August 2013 – improved financial covenants, repayment profile, default status
Liquidity uncertainty and unresolved vendor amendment requirements	\$85 million Thermo backstop, material vendor amendments and agreements – significant equityizations of subordinated debt complete
Liquidity & Balance Sheet	
Operational	
Recent financial performance recovery	Accelerating financial performance
Preliminary Duplex improvement	Meaningful revival of Duplex operations and MSS market share improvement
Launch pending for the final batch of six Second-Generation satellites	All Second-Generation satellites providing service by August 2013
R&D efforts for new product rollout	Released SPOT Global Phone, SPOT Gen3, SPOT Trace, STX3, Sat-Fi and the 9600
Spectrum Proceeding	
Uncertain regulatory pathway	FCC Nprm Released on November 1, 2013 – Comment period completed June 4, 2014

Liquidity Review and Balance Sheet Highlights



New Product Launches in Last 12 Months

New Products	Key Features & Benefits
 SPOT Gen3 <i>September 2013</i>	<ul style="list-style-type: none"> Battery life 2x SPOT 2 – enhanced customization features – smaller form factor USB for line power eliminates need for battery replacement Flexibility to outdoor enthusiasts to send pre-defined messages & GPS coordinates while off the grid
 SPOT Trace <i>November 2013</i>	<ul style="list-style-type: none"> Traces the path of anything, anytime, anywhere for consumer assets – extremely small and inexpensive Key applications include theft prevention Extreme Tracking offered at \$99.99 per year
 STX3 <i>February 2014</i>	<ul style="list-style-type: none"> World's lowest power-consuming satellite network chipset for M2M solutions – ability to operate for many months or years without human intervention Easy-to-integrate - enables VARs and OEMs to develop smaller, more efficient M2M solutions Applications include wide range of assets including LPG tanks, water tanks, vehicles, etc.
 Sat-Fi <i>June 2014</i>	<ul style="list-style-type: none"> Connects any Wi-Fi enabled device (e.g., tablets, smartphones and laptops) to Globalstar's satellite network for full voice and data services beyond the range of cellular networks and provides user continuous coverage by connecting to satellite network Targets boaters, emergency responders, oil & gas workers, miners, ranchers etc. However, a later version will be targeted towards the mass consumer market
 The 9600 <i>September 2014</i>	<ul style="list-style-type: none"> The 9600 is an affordable data hotspot which seamlessly pairs with the end-user's existing satellite phone and smartphone to send and receive data over Globalstar's satellite network Pocket-size, light weight product with 4 hours of battery life

Satellite Communications for the Mass Consumer Market

2" X 3" Hughes-based \$100 Mass Market Product

Turns any smartphone into a satellite phone

Market Opportunity

2 Billion People Live, Work or Travel Outside of Cellular Coverage



Advantages / Features

Inexpensive satellite capability for any Wi-Fi enabled smartphone, tablet or computer

75% Landmass Beyond Terrestrial Coverage

Constant **connectivity** when **out of terrestrial coverage** for calls, email and text messages

Reduced costs dramatically expand Globalstar's addressable market

Future Growth Opportunities Overview

Geographical Expansion

- Built-out sales and marketing infrastructure in Brazil
- Initiated expansion efforts in Colombia and Latin America
- Initiated additional greenfield expansion opportunities

Second-Generation Ground Upgrades

- Rollout is anticipated to begin in North America in late 2015 followed by Europe and Brazil in 2016 – data speeds increase 25x
- Integration of Hughes chip allows for the rollout of smaller, inexpensive and mass market consumer friendly satellite communication devices

New Products and Future Opportunities

- Launched Sat-Fi in June 2014 – concurrent with the implementation of Second-Generation ground upgrades, a \$100 mass market device will be released
- Satellite augmented, scalable, reliable and secure air traffic management solution

Valuable Spectrum Assets

- Domestic regulatory process nears completion – immediate deployment of managed Wi-Fi channel coast to coast
- Globally harmonized spectrum asset offers the potential for global deployment of TLPS

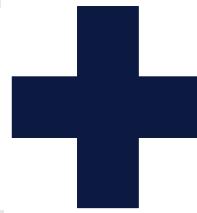
Key Value Drivers

Core MSS Operations

- Fully restored satellite network for core MSS operations with a new \$1 billion constellation
- Diverse business lines across consumer, commercial and government markets
- Historically, focus has been on North America – beginning in 2014, operational focus has materially expanded

U.S. Spectrum Value

- 1.6 GHz and 2.4 GHz U.S. licenses
- Targeting Terrestrial Low Power Service (“TLPSS”) authority by end of 2014
 - Managed, carrier grade service
 - Increased data speeds and range
 - Leverages existing Wi-Fi infrastructure



Global Spectrum Value

- ITU authority for 25.225 MHz – opportunity to free up terrestrial authority worldwide
- Unique globally harmonized position
- Opportunity to deploy terrestrial services including TLPSS after U.S. approval – leverages worldwide Wi-Fi standards and devices